

Based on our review of the Maine Department of Environmental Protection (MDEP) spill report list dated 10 February 1993 neither the subject site nor the adjacent surrounding properties have had reported on-site petroleum releases.

Based on our review of the MDEP Bureau of Oil and Hazardous Materials Control Division list of all locations reported, there are no listed discharges within or in the vicinity of the subject property.

At the request of Mr. Lawrence J. Keddy our regulatory record review did not include direct contact with MDEP relative to the subject property, the adjacent Depot Energy Company or New England Antigenetics.

III. POTENTIAL SITE CONTAMINATION:

Lead Based Paints: A review of the subject facilities relative to potential sources of lead based paints (LBP's) was not conducted since current state and federal regulations addressed LBP'S only in commercial building where exposure to children is possible (e.g. schools and daycare centers).

Asbestos Containing Materials: Under the clean air act of 1970 the EPA has been regulating many asbestos containing materials (ACM'S) which by EPA definition are materials which have more than one percent asbestos. In the mid-seventies, several major kinds of asbestos containing materials, such as spray applied insulation, fireproofing and acoustical surface materials were banned by the EPA because of growing concern of health effects (particularly cancer) associated with exposure to such materials.

Based on information obtained during this assessment regarding the age of the subject facility a review of the potential asbestos containing materials is considered necessary.

A number of areas of concern relative to potential asbestos containing materials were observed during our site reconnaissance. Specifically visibly friable steam line insulation throughout Building No. 4, acoustical ceiling tile in Building No. 1 and resilient flooring. Transit panel roofing in Building No. 6.

This limited asbestos survey is intended as an assessment of the current accessible and visible interior materials of the subject facility and is based on the current condition and suspected age of the materials. It is not an inspection, sampling and testing program designed to account for all potential asbestos containing materials within the subject facility. Furthermore it does not address potential asbestos containing materials within site machinery, equipment, generators, furnaces, holding tanks, and so forth.

We recommend that a comprehensive asbestos inspection and testing program be implemented within the subject facility and on-site equipment and machinery.

IV. CONCLUSIONS:

The subject site is currently developed as a large industrial facility as detailed in Figure No. 2. A portion of the facility is currently utilized as a machine shop. The subject property was developed in the early 1900's as a paper mill and during its lifetime has been utilized as a steel mill and forging shop, manufacturing steel sprinkler pipes, heavy equipment parts and concrete reinforcing steel.

Based on our observations during our site reconnaissance, our review of city records, regulatory agency lists, historical aerial photographs and site interviews there is potential concern of site soil contamination that may require remediation.

Furthermore there are a number of areas of concern within and in the vicinity of the subject property that would require more detailed investigation relative to their potential for surficial and subsurface contamination of the subject property.

1. Based on our conversations with Mr. Keddy and Mr. Crawford there is known petroleum contamination around the 10,000-gallon above-ground petroleum tank. However due to snow cover the area was not visible at the time of our site visit.
2. The location and condition of the fuel lines from the above-ground 10,000 and 15,000-gallon fuel tanks is unknown. Further investigation of their location and condition is recommended.
3. A garage building existed in the 1970's in the southeastern quarter of the subject property. Further inspection as well as subsurface investigation is recommended relative to activities in this area.

4. The old substation pad and transformer pad adjacent to Buildings Nos. 5 and 6 require further inspection and subsurface investigation relative to potential contamination from Polychlorinated Biphenyls (PCB's).
5. The 10,000-gallon and 15,000-gallon above-ground fuel tanks were not observed in the 1953 and 1962 aerial photographs, and the source of fuel for the subject site then is unknown. Furthermore it is believed that the coal burning plant (Building No. 3) was not operational during this period. We recommend further investigation into the source of fuel utilized during this period and the location of fuel storage.
6. An unknown structure observed in the 1962 aerial photograph adjacent to and north of Building No. 4 requires further inspection and subsurface investigation relative to potential sources of contamination and underground structures.
7. The outfall location of the large floor drain observed in the basement area of Building No. 4 is unknown. Further investigation is required.
8. Access to Building No. 3 was not possible due to the collapse of the roof and extensive snow cover within the facility. A complete walk-through of this portion of the subject property as well as the remaining snow covered areas of the site is recommended once the snow cover has melted.
9. A complete regulatory record review of the nearby Depot Energy Company site and New England Antigenetic site is recommended.

V. CLOSURE:

This review has been performed for your use in connection with the property on Maine State Route No. 202 in South Windham, Maine. The conclusions of Consla Geotechnical Engineering, Inc. are based upon the scope of work described herein and the referenced sources of information in accordance with generally accepted environmental engineering practice. Any additional pertinent information which becomes available concerning this site should be provided to CGE for review in order that our conclusions can be revised as necessary.

Thank you for selecting us to perform this study. If you should have any questions or require additional information, please contact us.

Sincerely yours,
Consla Geotechnical Engineering, Inc.

Keith A. Wallace
Staff Engineer

John A. Consla (KS)
John A. Consla, P.E.
President

Enclosures: Fig. No. 1 - U.S.G.S. Quadrangle Map
Fig. No. 2 - General Site Plan

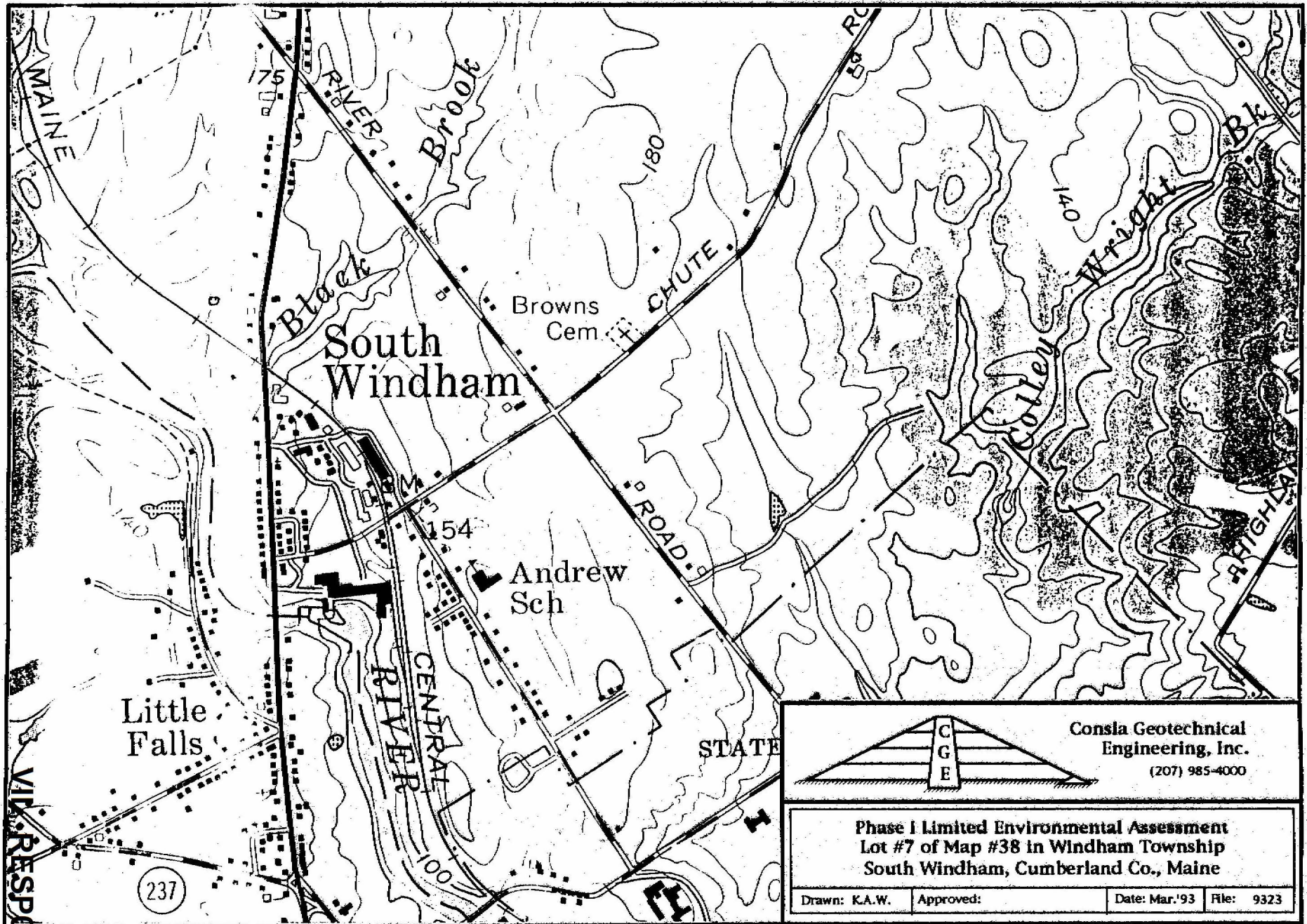


Figure No. 1

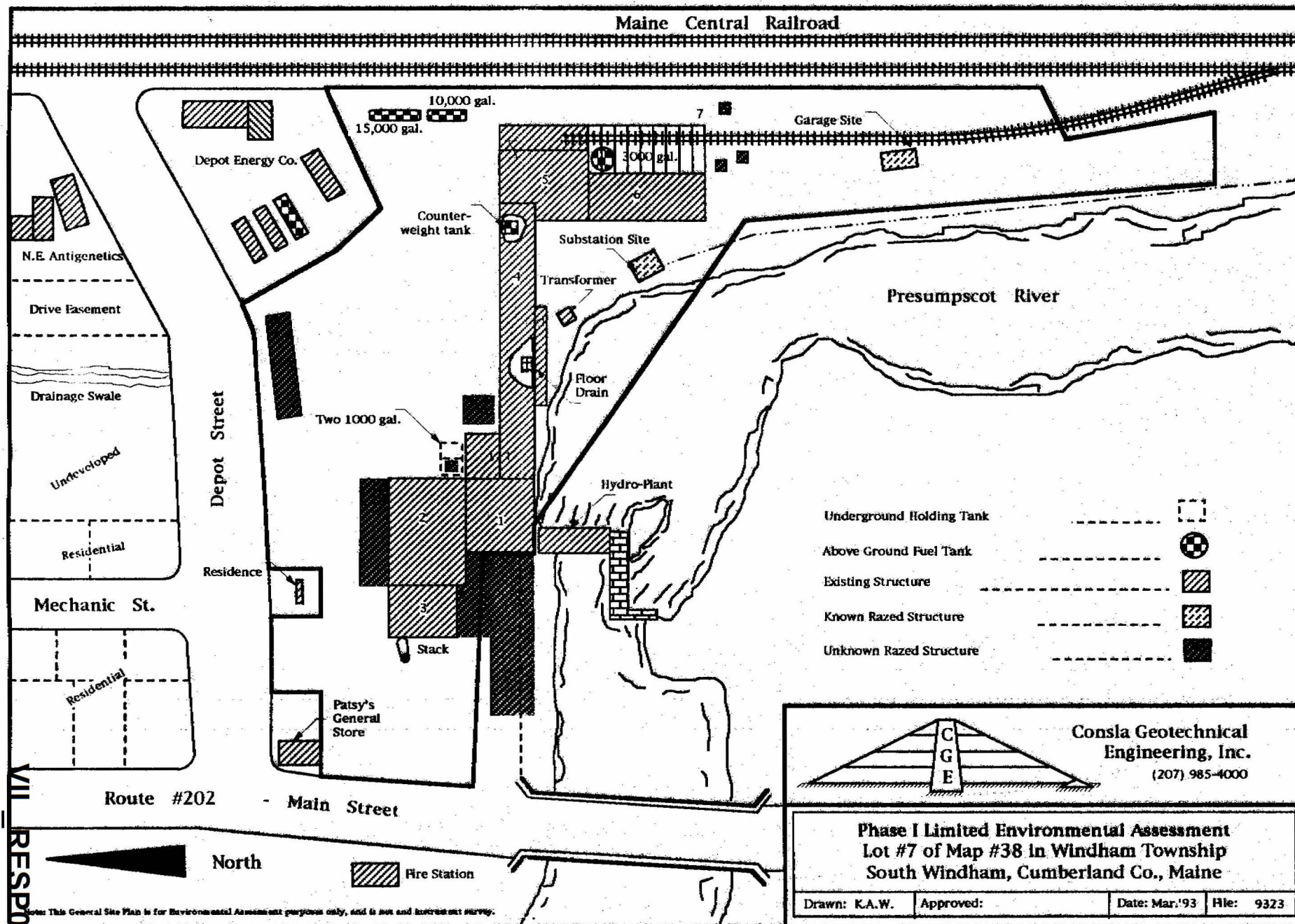


Figure No. 2

VII
RESP00758


**PHASE I ENVIRONMENTAL SITE ASSESSMENT
KEDDY MANUFACTURING COMPANY
SOUTH WINDHAM, MAINE**


Submitted to:
Merritt Technologies Corporation
2213 M Street NW, Suite 300
Washington, DC 20037

Submitted by:
Acadia Environmental Technology
4 Milk Street
Portland, Maine 04101

March 2, 1994

Prepared by:


Alison H. Jones
Hydrogeologist


Thomas E. Schwarm, CG
President-Hydrogeologist



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March 2, 1994

Kelly Hattel
Merritt Technologies Corporation
2213 M Street NW, Suite 300
Washington, DC 20037

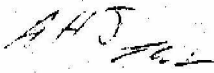
RE: Phase I Environmental Site Assessment Report
Keddy Manufacturing Company
South Windham, Maine

Dear Ms. Hattel:

Acadia Environmental Technology prepared this report of the Phase I environmental site assessment of Keddy Manufacturing in South Windham, Maine. Enclosed please find an original of the report, and one copy. Please feel free to call us if you should have any questions.

Acadia appreciates working with you on this project

Sincerely,



Alison H. Jones
Hydrogeologist



Thomas F. Schwarm, CG
President-Hydrogeologist

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Introduction

Purpose

Acadia Environmental Technology (Acadia) was retained by Merritt Technologies, Inc. (Merritt) to conduct this Phase I environmental site assessment of the Keddy Manufacturing Facility at 7 Depot Street in South Windham, Maine. The objective of this assessment is to evaluate the presence, or the likelihood of the presence, of environmental concerns that could pose liabilities to a future owner.

Limiting Conditions

This assessment was conducted under adverse winter conditions. Virtually all of the buildings were unheated. Water leaking from the roofs had frozen on many of the floors and walls. Walking was hazardous and not all areas were accessible. Generally, there were no operating lights in the buildings. The former boiler building, which had collapsed, was unsafe to enter. Its interior was covered with snow which hid the contents. More than one foot of snow covered the site during the entire investigation period. Almost all of the ground surface could not be inspected for stained soil, stressed vegetation, or other evidence of disposal of liquid or solid waste.

Acadia performed this Phase I environmental site assessment in a professional manner using that degree of skill and care exercised for similar projects under similar conditions by reputable and competent environmental consultants in Maine. Acadia shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed to it at the time the investigation was performed. The conclusions presented in this Report were based solely upon the services described, which were performed within the time and budgetary constraints imposed by the customer.

This report shall not be construed to create any warranty of representation that the real property of which the investigation was conducted is free of pollution or complies with any or all applicable regulatory or statutory requirement, or that the property is fit for any particular purpose. No third party is entitled to rely upon any information or opinions contained in this report.

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Scope of Work

The scope of work of this Phase 1 site assessment included:

- Background research, including review of Maine Department of Environmental Protection (DEP) records and Sanborn maps.
- Interviews with people who have knowledge of the property, including town officials and representatives of the owner.
- Site walkover to view and photograph items that may be of environmental concern.
- An additional site visit for follow-up observation.
- Preparation of this report.

Site Description

Location and Legal Description

The Keddy Manufacturing Facility is located in South Windham, Maine at 7 Depot Street near the intersection of Route 202 and Depot Road. The property is specified as Lot 7 of Map 38 on the Windham tax assessors maps as shown in Figure 1.

Site and Vicinity Characteristics

The Keddy facility is located in a small town with mixed land uses. Zoning in the area includes industrial, medium-density residential, and general shoreland development zones. The town has public water. Public sewer is also available. The Presumpscot River runs through the town adjacent to the Keddy property (topographic map, Figure 2).

The Keddy property has frontage on Route 202 and Depot Street; it encompasses approximately 85 acres. Buildings at the site comprise approximately 90,000 square feet on several levels (figure 3). One side of lot is adjacent to the Presumpscot River and the building extends over the river in some locations. This river is classified as Class C by the DEP. The Keddy property is zoned for industrial use.

The public sewer system runs in front of the facility near Main Street. However, the facility has not been hooked up to the sewer system to date. Two 1000 gallon underground concrete sewerage holding tanks have been and are still being used. The buildings are heated by oil-fueled boilers. There is no cooling system.

There are gravel roads and parking areas on the Keddy property. Their approximate locations are indicated on Figure 3. In addition, a railroad track crosses the back of the property behind building 5 and 6.

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Information reported by user regarding environmental liens or specialized knowledge or experience

No information of previous environmental problem, hazardous waste disposal, leaking tanks, lead paint or asbestos use was reported by the owner's representative.

Current uses of property

The property has been leased by the Barnard Marquit Corporation, a steel foundry company, since 1978, however the company has never had any operations at this site. Barnard Marquit obtained a Waste Discharge License from the Maine DEP on June 18, 1987 for 0.56 million gallons of non-contact cooling water per day (Appendix A). However, the owner's representatives and the monitoring reports indicate that there has been no discharge from the facility.

A machine shop is currently operating in building 1 on the ground level. This shop is operated by the Cumberland Corporation (owned by Mr. Keddy) for repair and maintenance of his other properties. The machine shop uses fuel oil, kerosene, water-soluble cutting oil, paint, and small quantities of other chemicals. Waste oil is taken to a garage where it is burned.

Background Information

Past uses of property

The Keddy property has been used primarily for wood, wood pulp, and paper for a variety of industries. The Sanborn maps show that the mill was built in different stages. The initial buildings are shown on the 1885 map. The layout of the existing buildings is consistent with paper mill use. The 1934 Sanborn map (Appendix B) shows the most buildings. Some buildings and tanks shown on the maps are no longer present.

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The following chronology was compiled from Sanborn maps and information provided by Ann Googins, who represented the owner, Mr. Keddy.

Pre-1885-Apr 4, 1900 Sebago Wood Board Co.

July 25, 1913	Dam Height Agreement E.I. DuPont Demours Powder Co. and Androscoggin Pulp Co.
March 29, 1917	From Cora E. Libby to Androscoggin Pulp Co.
May 1, 1917	Fiske Warren, Cornelia Warren, & William Dunbar, Residuary Trustees to Androscoggin Pulp Co.
September 8, 1919	From William H. Bickford to Androscoggin Pulp Co.
March 7, 1940	Robert Gair Co., Inc. to Cumberland Securities Corp.
April 29, 1941	Sewer right of way to Julia L. Siciliano
October 6, 1944	Right of way to Central Maine Power
June 25, 1945	Indenture--Cumberland Securities to Windham Fibres, Inc.
January 29, 1954	Indenture portion--Cumberland Securities to Atlantic Mills
August 19, 1954	Indenture portion--Irving Fox et al to Atlantic Mills, Inc.
June 6, 1961	Atlantic Mills, Inc. to Keddy Manufacturing Co.
October 30, 1961	Quit-claim deed--Atlantic Mills, Inc. to Lawrence J. Keddy
October 17, 1969	Keddy Manufacturing to Grinnell Corp.
August 21, 1973	ITT Grinnell Corp. to Park Corp.
May 9, 1974	Park Corp. to Lawrence J. Keddy
January 3, 1975	Mortgage and Security Agreement--National Metal Converters of Windham, Inc.
January 17, 1978	Lawrence J. Keddy takes back property

Manufacturing of wood pulp and box board was the primary activity at the site from before 1885 until about 1940 when Sebago and Androscoggin Pulp and Paper operated the facility. As part of their activities, the Sanborn maps show there was a machine shop at the site as well as coal and oil storage. Sanborn maps from 1922 to 1944 indicate that two large fuel oil storage tanks (150,000 and 250,000 gallons) were located on the property near Depot Street.

Cumberland Securities operated the facility as a box board mill, according to the 1944 Sanborn Map. The use is unclear from 1944 until Keddy bought it in 1961. Apparently Maine Steel fabricated snowplow blades at the site sometime during this period. According to Ann Googins, Baker Refrigeration and Bluestein operated at the site. We were unable to determine when these businesses operated or what they did. Keddy installed metal working equipment for steel melting and forging. According to the owner's representative, they made pipe flanges by induction melting and drop forging. Machining of the flanges was done at an out-of-state facility. Grinnell (later acquired by ITT) bought the facility and product line in 1969.

According to the Sanborn maps, a railroad track crossed the back of the property for much of its history. A railroad spur also wrapped around the building.

In 1975, National Metal Converters operated a rolling mill and made rebar for concrete at the site. They eventually became New England Steel. The company went out of business in 1978 and Keddy took back the property, leasing it to Barnard-Marquit. Barnard-Marquit has never used the facility.

The paper and steel forging industries generally use a wide variety of chemicals in their day-to-day activities. A list of chemicals associated with these uses is in Appendix C.

Adjoining properties

**Table I:
Current Abutters and Property Uses**

Abutter	Map/Lot	Property Use
Jean Winslow	37/4B	residential
Mary and Lester Coulombe	37/12	residential
Walter and Sandra Thorpe	37/13	residential
Janet Foster	37/20	residential
Merrill Laskey	37/21	residential
Merrill Laskey	38/3	residential
Marjorie Drost	38/5	residential
Merrill Laskey	38/6	Energy Depot--coal storage/sales former train station
Wm. & Patricia Dilio	38/8	residential
"	38/9	Corner store
S. Windham Fire Dept	38/12	Fire House
Scott Paper	38/10, 11	Hydroelectric Dam
Richard Rogers	38/48	Commercial
Richard Pierce	38/41	Commercial
Depot Street Condominiums	38/49D	offices, formerly owned by L.C. Andrew lumber mill
VA Regional Loan Guarantee Division	38/39	Commercial
Charles Dickenson	38/40	Commercial

The L.C. Andrew's lumber mill is shown on the 1922 Sanborn map as a wood planing and box mill. On the later maps a milling and lumber yard is indicated. The yard was called and we were told that only sawing and milling operations were conducted.

At Energy Depot, a 500-gallon underground gasoline tank was removed in the fall of 1993. Some oil was observed in the hole. The DEP has not required any investigation or cleanup. This facility was used for coal and oil storage. There may have been a vehicle repair garage at the site. There is little current activity at the site.

Public Information Search Results

Acadia conducted a file search at the DEP to determine if there had been any reported hazardous waste or petroleum spills or investigations at the site. No records pertaining to this property were found. There were no references to the property under the US EPA Hazardous Waste Handlers List. There were no registered underground petroleum tanks or records of tank removals at the site, according to the State's tank listing.

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Information from Site Reconnaissance

Acadia visited the site twice. During the initial visit on February 9, 1994, Bruce Crawford and Ann Googins were interviewed regarding the site history. The buildings, with the exception of the boiler room were walked through. During a second visit on February 22, the buildings were walked through again and the property outside was walked. No compounds were detected in any of these locations.

The buildings are primarily of concrete construction with steel and plastic roofing. There were many roof leaks which resulted in ice on the walls and floors. There were many pieces of heavy equipment including metal furnaces, pulp tanks, rolling mills, presses, and boilers. The buildings are huge with high ceilings and extensive basements. The owner's representatives guided us through the whole complex since it would have been difficult for an outsider to find all the rooms and buildings. During the first visit travel was extremely difficult because of the extensive ice in the buildings and the extreme cold. The second visit was on an unusually warm day. During that visit the snow on the leaky roofs was melting so it was essentially raining inside. Water had pooled on the icy floors. A Photovac photoionization detector (PID) with a 10.6 eV lamp was used to test for volatile organic compounds in the floor drains. No chemicals were detected. Most of the floor drains were in the area of the mill that is over the water. It is likely that most waste liquids in the past were discharged through these drains directly into the river. For many years, two 1,000-gallon underground concrete holding tanks have been used to store waste water. These are pumped out periodically. If these tanks leaked, they could have released some industrial chemicals into the soil.

The property outside the building was covered with more than a foot of snow during both visits. At the time of the second visit, the snow had melted on some of the south-facing slopes along the river. In these areas metal slag, rusted drums, metal scrap, and what may have been gasket material (possibly containing asbestos) was found. Considering the small amount of soil that was exposed, it was surprising how much trash was seen. This may be indicative of generally poor waste handling practices. Soil samples were collected and analyzed in this area, no chemicals were detected. An abandoned sewer line was identified on the property. Water was discharging from it but there was no odor and the PID did not detect any chemicals.

Acadia observed the following:

- Piles of metal slag, rusted drums, and other metal waste that appear to be associated with the mill were observed on site and on the adjoining Scott Paper property. Considering how much snow was present, it was surprising how much debris was found.
- Possible asbestos-containing materials (ACM's) are present at the site. These include refractory materials, refractory brick, furnace mortar material, dust from refractory

materials, pipe insulation, and exterior siding. The use of this site is consistent with the widespread use of asbestos.

- Peeling paint is prevalent. It is likely that some of the paint contains lead and may need special handling and disposal.
- Two large reportedly concrete sewerage holding tanks were reported.
- There are numerous small containers of oil, paint, and solvents.
- There is a substantial electrical power infrastructure at this site. Many transformers were seen. Most of these appear to be dry so they would not contain PCBs. There was one wet transformer (see photos, Appendix D) and there may be others that were not seen. These may require testing, and if they contain PCBs, special disposal.
- There are two 10,000-gallon above-ground fuel oil storage tanks adjacent to the railroad tracks behind the building. These were apparently used to store heavy oil. These are no longer in use. There is some spilled oil, which looks like asphalt, under the tanks.
- There is a 275-gallon heating oil tank in use in the machine shop.
- There is a 3000-gallon above-ground fuel oil tank outside of the building (see photos). This tank was used for starting the boiler that is not currently used.
- Oil is stored in a 55-gallon drum on the ground level of building 1 for heating the front offices.
- There is a milk tank that was reportedly never used.

Information from Interviews

Acadia interviewed Roger Timmons, the Code Enforcement officer of Windham, Maine on February 11, 1994. Mr. Timmons was not familiar with the operations of the mill or chemicals used at the site. He did remember slabs from old buildings at the site that are now gone, possibly the old machine shop shown on the Sanborn maps. Acadia could not find these slabs because of snow cover. He mentioned that a sewer discharge line used to run through the property from the residential area and the school to the east. This line was never removed. Acadia found a drainage line that could have been that sewer line. He noted that there was heavy truck traffic on the north side of the building near Depot Road. He recommended that the ground surface be inspected for staining.

Charles Hammond, the Chief of Fire and Rescue, Windham Fire Department, was interviewed on February 10. He recalled an oil tank in the boiler room that was exposed when the building started to collapse. He did not know if it was still there. He did not know about chemical use at the site.

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Conclusions and Recommendations

Based on direct observations, interviews, and background research, Acadia concludes the following:

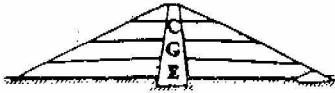
- The types of businesses that have operated at the site traditionally use a variety of chemicals in their routine operations (Appendix C). While Acadia could not document use of chemicals other than fuel oil and refractory materials, it is likely that a variety of chemicals were used at the site during the past century. Most waste was probably discharged into the river, but it is possible that some may have been disposed of on the property.
- Acadia observed possible asbestos-containing materials (ACM's) at the site. Among the possible ACM's are: pipe wrap, bags of refractory materials, furnace brick and mortar, dust from refractory and furnace materials, and exterior siding. We recommend retaining a company to do a thorough asbestos assessment.
- Even though most of the site was covered by one foot of snow, we observed scrap steel, slag, and rusted drums in several places. We expect to see more waste materials when the snow melts. The amount of trash suggests poor waste handling practices, which may indicate that other materials were disposed of on site. If petroleum, ACM, solvents, or other chemicals were discarded on site, clean up may be required. Refuse along the stream bank may need to be removed to comply with State laws. Some of this refuse is located on the adjacent S.D. Warren property, but the material appears to be from the steel mill. This may constitute a liability.
- There is evidence of oil spillage near the two 10,000 gallon oil tanks. Some soil removal may be necessary in this area.
- Large areas of peeling paint were observed. If this paint contains lead, special handling and disposal may be necessary that could increase rehabilitation costs. There may be lead-paint dust in the building from paint degradation or previous removal. We recommended paint evaluation by a qualified consultant to determine if costly remediation will be necessary.
- There are numerous small containers of oil, paint, and solvents that should be removed by the current owners before the sale is completed. Most of these containers are in the machine shop and are currently in use.
- This property has heavy duty electrical service. Many transformers were observed that the owner's representative told us were dry, so they should not contain PCBs. There is one transformer (not in use) in the building which may be wet and could possibly contain PCBs. This transformer should be removed by the current owner. The current owner should retain responsibility for any wet transformers found at the site.

- Sanborn maps indicate that there were very large oil storage tanks on the Depot Road side of the mill. The maps also show that there was a machine shop near the corner of Depot and Main Streets. These areas are now covered with snow, and should be inspected for oil and chemical releases after the snow melts.
- The mill's waste water is stored in two 1,000-gallon underground concrete tanks. These tanks are pumped out periodically. These tanks and their supply lines may have released oil, solvents, or other chemicals into the soil
- There may be petroleum in the soil near the old fuel tank locations on Depot Road, near the existing 10,000 gallon tanks, near the 3000 gallon tank, or near the old machine shop.

Based on the historical site use, materials observed at the site, and the evidence of poor waste handling, Acadia recommends further investigation of this site to evaluate the potential cleanup costs that may be incurred to comply with State and Federal regulations. This investigation work should be conducted after the snow melts and the ground surface is visible.

On the positive side, because this mill is so close to the river (it is over the river in some places), most liquid wastes were probably discharged directly into the river. We observed many floor drains that emptied directly into the river.

Consla Geotechnical Engineering, Inc.



- Geotechnical Engineering
- Site Exploration
- Environmental Engineering
- Geologic & Hydrogeologic Investigation

CONFIDENTIAL

18 March 1993
File No. 9323

Preti, Flaherty, Beliveau & Pachios
443 Congress Street
Portland, ME 04101

Attention: Mr. Harold C. Pachios

Subject: Phase I Limited Environmental Assessment
Lot No. 7 of Map 38
Windham Township
South Windham, Cumberland County, Maine

Dear Mr. Pachios:

As requested by Mr. Laurence Keddy, we have completed our Phase I Limited Environmental Assessment of the subject property. This assessment provides our professional opinion relative to the potential for subsurface site contamination from toxic and or hazardous waste materials. Environmental in the context of this report does not include an ecological evaluation of the resources of the site. Further limitations of this Phase I Limited Environmental Assessment are discussed in the attachment form. This report documents our findings and presents our preliminary level engineering conclusions.

I. HISTORICAL INFORMATION:

Location and Description: The subject property is located in Lot No. 7 of Map 38 in the Windham Township, Cumberland County, Maine. The property boundary survey referenced during this environmental assessment of the subject property was prepared for National Metal Converters and performed by Owen Haskell, Inc., and signed on June 19, 1974 by Mr. Steven S. Shaw State of Maine land surveyor registration no. 779.

The subject property is accessible from Main Street (Maine State Route No. 202) to the west, Depot Street to the north, the Maine Central Railroad line to the east, and the Presumpscot River to the south.